

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***STATEMENT OF BASIS / SUMMARY***

Conditional Major, Operating

Permit: F-24-066

Kentucky Chrome Works, LLC

100 Bluegrass Avenue

Horse Cave, KY 42749

December 2, 2024

Vahid Bakhtiari, Reviewer

SOURCE ID: 21-099-00018

AGENCY INTEREST: 108329

ACTIVITY: APE20240001

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## SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3741, Electroplating, Plating, Polishing, Anodizing, and Coloring

Single Source Det.  Yes  No If Yes, Affiliated Source AI:

Source-wide Limit  Yes  No If Yes, See Section 4, Table A

28 Source Category  Yes  No If Yes, Category:

County: Hart

Nonattainment Area  N/A  PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  Ozone  Lead  
If yes, list Classification:

PTE\* greater than 100 tpy for any criteria air pollutant  Yes  No

If yes, for what pollutant(s)?

PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  VOC

PTE\* greater than 250 tpy for any criteria air pollutant  Yes  No

If yes, for what pollutant(s)?

PM<sub>10</sub>  PM<sub>2.5</sub>  CO  NO<sub>x</sub>  SO<sub>2</sub>  VOC

PTE\* greater than 10 tpy for any single hazardous air pollutant (HAP)  Yes  No

If yes, list which pollutant(s): Styrene, Ethylene Glycol Monobutyl Ether

PTE\* greater than 25 tpy for combined HAP  Yes  No

\*PTE does not include self-imposed emission limitations.

### Description of Facility:

Kentucky Chrome Works (KCW) is an Electroplating, Plating, Polishing, Anodizing, and Coloring facility in Horse Cave, Kentucky for manufacturing of decorative chrome plating and metal finishing services for the automotive and appliance industries. Operations at KCW facility include electroplating and electroless or non-electrolytic plating.

**SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM**

Permit Number: F-24-066

Activities: APE20240001

Received: September 7, 2024

Application Complete Date: November 5, 2024

Permit Action:  Initial  Renewal  Significant Rev  Minor Rev  Administrative

Construction/Modification Requested?  Yes  No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action  Yes  No

- APE20210002: This 502(b)(10) change included installation of an automated wheel polisher.
- APE20210003: This 502(b)(10) change included replacement of one baghouse with a total of five (5) Donaldson Dust Collectors under Copper Manual Buffing (EU 01).

**Description of Action:**

On September 7, 2024, the Division received a permit renewal application from KCW to renew their existing Conditional Major permit F-19-039. With this permit renewal F-24-066, the Division only updated and made formatting changes throughout the permit to be consistent and clear. No other changes have been requested by KCW.

Emission Summary			
Pollutant	<sup>(1)</sup> 2023 Actual (tpy)	<sup>(2)</sup> PTE F-24-066 (tpy)	<sup>(3)</sup> PTE Allowable (tpy)
CO	1.71	6.61	
NO <sub>x</sub>	1.02	6.28	
PT	0.48	34.92	< 90
PM <sub>10</sub>	0.48	35.37	< 90
PM <sub>2.5</sub>	0.28	25.64	< 90
SO <sub>2</sub>	0.01	0.05	
VOC	0.96	2,034	< 90
Lead	0.00001	0.00004	
Greenhouse Gases (GHGs)			
Carbon Dioxide	2447	9,389	
Methane	0.05	0.18	
Nitrous Oxide	0.01	0.02	
CO <sub>2</sub> Equivalent (CO <sub>2</sub> e)		9,399	
Hazardous Air Pollutants (HAPs)			
Ethylene Glycol Monobutyl Ether	0.46	958	< 9
Styrene	0.01	96	< 9
Chromium VI and Compounds	0.001	0.004	
Nickel (and Compounds)	0.01	0.11	
Combined HAPs:	0.49	1,054	< 22.5

(1) Based on 2023 KYEIS report.

(2) Includes required control devices as required by the permit.

(3) Source-wide limits of 90 tpy or less for PM/PM<sub>10</sub>/PM<sub>2.5</sub> and VOC, and 9 tpy or less for any individual HAP and 22.5 tpy or less for combined HAP to remain a conditional major source.

**SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS**

<b>EP 40: York Shipley Steam Boiler</b>				
<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
Opacity	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed when burning natural gas
PM	0.56 lb/MMBtu	401 KAR 59:015, Section 4(1)(a)	AP-42 Table 1.4-2	Assumed when burning natural gas
SO <sub>2</sub>	3.0 lb/MMBtu	401 KAR 59:015, Section 5(1)(a)(1)	AP-42 Table 1.4-2	Assumed when burning natural gas
<b>Initial Construction Date:</b> 1/1/2010				
<b>Process Description:</b> The unit uses only natural gas as fuel. Maximum heat input capacity: 7.382 MMBtu/hr Control Equipment: None				
<b>Applicable Regulation:</b> <b>401 KAR 59:015, <i>New indirect heat exchangers.</i></b> This regulation is applicable to indirect heat exchangers having a heat input capacity greater than one (1) million Btu per hour (MMBtu/hr) commenced on or after April 9, 1972 (401 KAR 59:015, Section 2(1)).				
<b>State-Origin Requirement:</b> <b>401 KAR 63:020, <i>Potentially hazardous matter or toxic substances.</i></b> This regulation is applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.				
<b>Comments:</b> Emissions are calculated using emission factors from AP-42, Tables 1.4-1, 1.4-2, 1.4-3, and 40 CFR 98 Tables C-1 and C-2. The high heating value (HHV) used for natural gas is 1020 Btu/MMscf.				

<b>Emission Group 1 – Buffing &amp; Polishing:</b>					
<b>Copper Buffing Processes (EU 01):</b>					
<b>Copper Manual Buffing (EP 01-04) &amp; Copper Robotic Buffing (EP 01-05)</b>					
<b>Raw Polishing Processes (EU 02):</b>					
<b>Raw Manual Polishing (EP 02-22) &amp; Raw Robotic Polishing (EP 02-23)</b>					
<b>Pollutant</b>	<b>Emission Limit or Standard</b>		<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
PM	EPs 02-22 & 02-23	2.34 lb/hr	401 KAR 59:010, Section 3(2)	Material Balance & MSDS	Monthly emission calculations; monitoring; recordkeeping
	EPs 01-04 & 01-05	2.58 lb/hr	401 KAR 61:020, Section 3(2)		

**Emission Group 1 – Buffing & Polishing:**  
**Copper Buffing Processes (EU 01):**  
**Copper Manual Buffing (EP 01-04) & Copper Robotic Buffing (EP 01-05)**  
**Raw Polishing Processes (EU 02):**  
**Raw Manual Polishing (EP 02-22) & Raw Robotic Polishing (EP 02-23)**

Opacity	EPs 02-22 & 02-23	20% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Weekly qualitative observations; monitoring; recordkeeping
	EPs 01-04 & 01-05	40% opacity	401 KAR 61:020, Section 3(1)(a)		

**Initial Construction Date:**

EP 01-04 & EP 01-05: 1/1/1969; EP 02-22 & EP 02-23: 1/1/2007

**Process Description:**

Copper Manual Buffing (EP 01-04) consists of eight (8) manual stations and Copper Robotic Buffing (EP 01-05) consists of two (2) robots for processing copper plated wheels. Emissions from copper buffing processes (EU 01) are controlled by Donaldson Baghouses DC 1-5 that vent inside the building. Raw Manual Polishing (EP 02-22) consists of total 16 manual stations and Raw Robotic Polishing (EP 02-23) has four (4) robots for processing raw cast wheels. Emissions from raw polishing processes (EU 02) are controlled by an Arrestall Dust Collector that vents outside the building and has a 99% control efficiency.

Maximum Capacity: 1.8 lbs of buffing compound/hr (0.0009 ton/hr) for each of the EPs 01-04, 01-05, 02-22, and 02-23

Control Device: Baghouse and building enclosure for EPs 01-04 and 01-05  
 Baghouse for EPs 02-22 & 02-23

**Applicable Regulations:**

**401 KAR 59:010, *New process operations.*** This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975, applicable to EPs 02-22 and 02-23.

**401 KAR 61:020, *Existing process operations.*** This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced before July 2, 1975, applicable to EPs 01-04 and 01-05.

**Comments:**

The buffing and polishing processes do not meet the definition of “dry mechanical polishing” in 40 CFR 63.11511, therefore are not subject to 40 CFR 63, Subpart WWWW.

Emission points 01-04 and 01-05 are controlled by a total of five (5) Donaldson Dust Collectors that vent inside the building with an overall control efficiency of 99.97%. Emission calculations are based on material balance and MSDS.

**Emission Group 2 – Paint Booths:**  
**Manual Spray Booths #1 & #2 (EP 06)**  
**Manual Spray Booths #3 & #4 (EP 07)**  
**Manual Spray Booths #5 & #6 (EP 08)**  
**Automatic Spray Booth (EP 09)**  
**Manual Spray Booths #7 & #8 (EP 11)**

Pollutant	Emission Limit or	Regulatory Basis for	Emission Factor	Compliance Method
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<b>Emission Group 2 – Paint Booths:                      Manual Spray Booths #1 &amp; #2 (EP 06)                      Manual Spray Booths #3 &amp; #4 (EP 07)                      Manual Spray Booths #5 &amp; #6 (EP 08)                      Automatic Spray Booth (EP 09)                      Manual Spray Booths #7 &amp; #8 (EP 11)</b>				
	Standard	Emission Limit or Standard	Used and Basis	
PM	2.34	401 KAR 59:010, Section 3(2)	Material Balance & MSDS	Monthly emission calculations; monitoring; recordkeeping
Opacity	20% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Weekly qualitative observations; monitoring; recordkeeping

**Initial Construction and/or Modification Date:**

EP 06: 1/1/1977; EP 07: 1/1/1977; EP 08: 1/1/1977; EP 09: 1/1/1977, modified: 1/1/2017; EP 11: 1/1/1977

**Process Description:**

Cast aluminum wheels are manually and automatically painted with a water based paint. Applicator cleaning occurs by soaking in Acetone. Water is used as a flush agent. Each Manual Spray Booth (EPs 06, 07, 08, and 11) is Dual 3-sided booth using up to four (4) applicators. The Automatic Spray Booth (EP 09) is conducted inside a 3-sided enclosed paint booth with air removed through a filter with 98% control efficiency. The unit contains two (2) robotic arms with one (1) spray nozzle each and utilizes up to two (2) applicators.

Maximum Capacity: 14 gal/hr per applicator for each emission point

Control Equipment: Passive Air Filter with 98% control efficiency

**Applicable Regulation:**

**401 KAR 59:010, *New process operations.*** This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.

**State-Origin Requirement:**

**401 KAR 63:020, *Potentially hazardous matter or toxic substances.*** This regulation is applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances, applies to emissions of Butyl Benzyl Phthlate (BBP), Aluminum, Ethylene Glycol Monobutyl Ether, Styrene, and 1,2,4-Trimethylbenzene.

**Comments:**

The paint booths can use up to four (4) applicators per booth, so the potential to emit calculations are based on the theoretical maximum usage of four (4) applicators per booth. Only the automatic spray booth uses two (2) applicators. All the paint booths use silver paint and black paint. The potential to emit calculations are based on a combination “worst case” from both types of paints. Emission factors for VOC and PM are the worst case percentages from the MSDS for constituents that fit the profile of PM or VOC.

Other activities associated with painting operations are: Paint Shield Wash Unit (EP 10), CASS Test Units #1 & #2 (EP 20-1), Drying Oven #1 – Washer Oven #408 (EP 20-2), Drying Oven #2 – Paint Room #487M

<b>Emission Group 2 – Paint Booths:</b> <b>Manual Spray Booths #1 &amp; #2 (EP 06)</b> <b>Manual Spray Booths #3 &amp; #4 (EP 07)</b> <b>Manual Spray Booths #5 &amp; #6 (EP 08)</b> <b>Automatic Spray Booth (EP 09)</b> <b>Manual Spray Booths #7 &amp; #8 (EP 11)</b>
(EP 21). These emission points are all insignificant activities and have been listed in Section C of the permit.

Chrome Plating Tank (EU 46): Chrome Plate #17 (EP 46-1)				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
PM	2.34	401 KAR 59:010, Section 3(2)	Material Balance & MSDS	Monthly emission calculations, application of combination of wetting agent/foam blanket fume suppressant
Opacity	20% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Weekly qualitative observations; monitoring; recordkeeping
Total Chromium (surface tension of the bath)	40 dynes/cm ( $2.8 \times 10^{-3}$ lbf/ft) as measured by a stalagmometer or 33 dynes/cm ( $2.3 \times 10^{-3}$ lbf/ft) as measured by a tensiometer	40 CFR 63.342(d)(3)	Material Balance & MSDS	Monitoring of the surface tension by measuring once every 4 hours during operation for the 1 <sup>st</sup> 40 hours, then once every 8 hours for 40 hours of operation, then once every 40 hours if no exceedances per 40 CFR 63.343(c)(5)

**Initial Construction Date:** 1/1/2010

**Process Description:**

Only EP 46-1 in chrome plating line is a decorative chromium electroplating tank using a chromic acid bath and is subject to 40 CFR 63, Subpart N. Chrome Plate #17 (EP 46-1) contains a 1200 gallons decorative chrome bath that contributes to the final plating layer in the Nickel process. The bath temperature is 110 °F.

Maximum Capacity: 2.75 lb/hr (or 0.001375 ton of wheels/hr) for each emission point

Control Method: Fume Suppressant

**Applicable Regulations:**

**401 KAR 59:010, New process operations.** This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.

**401 KAR 63:002, Section 2(4)(h), 40 C.F.R. 63.340 to 63.348, Table 1 (Subpart N), National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks,** applicable to EP 46-1.

**Chrome Plating Tank (EU 46): Chrome Plate #17 (EP 46-1)**

**Comments:**

The chromium plating tank, EU 46, uses a combination of wetting agent-type/foam blanket fume suppressant to reduce chromium emissions. The wetting agent/fume suppressant is not considered a control device for the purposes on 40 CFR 63, Subpart N and is not included in PTE calculations. All of the tanks at the facility use a wetting agent/fume suppressant, however, this control was not included in the PTE, since the permittee has other options for compliance. The surface tension is checked daily with a stalagmometer that is calibrated daily, prior to use.

The source submitted the initial notification on July 24, 1995, the notification of compliance on February 24, 1996 and the Decorative Chromium Electroplating Operations and Maintenance Plan on January 11, 1996. The source submitted an updated Decorative Chromium Electroplating Operations and Maintenance Plan as required by 40 CFR 63.342(f)(3)(i) on June 30, 2016 during permit renewal F-15-002.

**Emission Group 3 – Chrome Plating Line: EUs 50, 51, & 52**

**Microporous Nickel #01 (EP 50-4)**

**Bright Nickel #12 (EP 50-5)**

**High Sulfur Nickel #11 (EP 51-1)**

**Semi-Bright Nickel #10 (EP 51-2)**

**Semi-Bright Nickel #2 (EP 52-1)**

**Group 4 – Copper Plating Line: EU 48**

**Nickel Strike #19 (EP 48-1)**

<b>Pollutant</b>	<b>Emission Limit or Standard</b>	<b>Regulatory Basis for Emission Limit or Standard</b>	<b>Emission Factor Used and Basis</b>	<b>Compliance Method</b>
PM	2.34	401 KAR 59:010, Section 3(2)	Material Balance & MSDS	Monthly emission calculations; monitoring; recordkeeping
Opacity	20% opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Monthly qualitative observations; monitoring; recordkeeping

**Initial Construction Date:**

EP 50-4: 1/1/2010; EP 50-5: 1/1/2010; EP 51-1: 1/1/2010; EP 51-2: 1/1/2010; EP 52-1: 1/1/2010; EP 48-1: 1/1/2010

**Process Description:**

There are two (2) separate electroplating lines, the chrome line and the copper line. The chrome electroplating line includes EUs 46, 50, 51, & 52. The copper electroplating line includes EUs 47, 48, and 49.

Maximum Capacity: 2.75 lbs of wheels/hr for each of the tanks (EPs 50-4, 50-5, 51-1, 51-2, and 52-1)  
 4.76 lbs of wheels/hr for EP 48-1

Control Method: Wetting Agent

**Applicable Regulations:**

**401 KAR 59:010, New process operations.** This regulation is applicable to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates,



**Emission Group 3 – Chrome Plating Line: EUs 50, 51, & 52**  
**Microporous Nickel #01 (EP 50-4)**  
**Bright Nickel #12 (EP 50-5)**  
**High Sulfur Nickel #11 (EP 51-1)**  
**Semi-Bright Nickel #10 (EP 51-2)**  
**Semi-Bright Nickel #2 (EP 52-1)**  
**Group 4 – Copper Plating Line: EU 48**  
**Nickel Strike #19 (EP 48-1)**

commenced on or after July 2, 1975.

**401 KAR 63:002, Section 2(4)(uuuuu), 40 CFR 63.11504 to 63.11512, Table 1 (Subpart WWWWWW), National Emission Standard for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations**, applicable to EPs 50-4, 50-5, 51-1, 51-2, 52-1, and 48-1.

**Comments:**

The chrome electroplating tanks (EUs 50, 51, & 52) are new batch electrolytic process tanks containing one or more of the plating and polishing metal HAP and operate with a pH of less than 12. All tanks associated with the chrome plating line (except EP 46-1) are subject to 40 CFR 63, Subpart WWWWWW. This includes EPs 50-4, 50-5, 51-1, 51-2, and 52-1.

EP 48-1 is the only tank associated with the copper plating line that meets the criteria to be subject to 40 CFR 63, Subpart WWWWWW. This tank is a new batch electrolytic process tank containing one or more of the plating and polishing metal HAP and operates with a pH of less than 12.

EPs 50-4, 50-5, 51-1, 51-2, 52-1, and 48-1 do not meet the definition of “flash” or short-term electroplating in 40 CFR 63.11511. The permittee has three (3) options for compliance with 40 CFR 63, Subpart WWWWWW for these emission points. The permittee can use a wetting agent/fume suppressant, capture and exhaust emissions to a specified control device, or use tank covers.

EPs 47-2, 49-1, and 49-2 have both air agitation and electrical current applied to them, which results in emissions from these tanks. However, these tanks do not contain one or more of the plating and polishing metal HAP defined in 63.11511, therefore these tanks are not subject to 40 CFR 63, Subpart WWWWWW. The potential emissions from each of these emission points are less than half ton per year of combined HAPs and less than five (5) tons per year of regulated air pollutants. Accordingly, they have been listed in Section C of the permit.

In other tanks (EPs 47-1, 47-3, 48-2, 48-3, 48-4, 50-1, 50-2, and 50-3), the permittee does not perform plating, agitate, bubble, or use air sparging. This correlates to a lack of emissions from these tanks. Accordingly, these tanks have also been listed in Section C of the permit, but retain their emission point designation to enable inspectors to identify the tanks at the plant and determine the common stack they are vented to.

The bottleneck to all of the processes at the facility is the copper plating line, which is only capable of plating 36 wheels per hour. The throughputs for all downstream processes are based on this maximum plating capability, and as such, if the facility modifies its processes such that it becomes capable of processing more wheels per hour, a permit revision shall be submitted to modify the throughputs of all downstream processes.

**SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)**

**Testing Requirements/Results**

<b>Emission Unit(s)</b>	<b>Control Device</b>	<b>Parameter</b>	<b>Regulatory Basis</b>	<b>Frequency</b>	<b>Test Method</b>	<b>Permit Limit</b>	<b>Test Result</b>	<b>Thruput and Operating Parameter(s) Established During Test</b>	<b>Activity Graybar</b>	<b>Date of last Compliance Testing</b>
46	Fume Suppressant	Hexavalant Chromium (Cr <sup>+6</sup> )	40 CFR 63.342(d)(1)	Initial	EPA Method 306A	$4.4 \times 10^{-6}$ (gr/dscf) $4.34 \times 10^{-6}$ (lb/hr)	$4.18 \times 10^{-8}$ (gr/dscf) $3.71 \times 10^{-6}$ (lb/hr)	N/A	CMN20110002	June 9, 2011

**Footnotes:**

**SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS**

**Table A - Group Requirements:**

<b>Emission and Operating Limit</b>	<b>Regulation</b>	<b>Emission Unit</b>
90 tpy of PM/PM <sub>10</sub> /PM <sub>2.5</sub> emissions	To preclude 401 KAR 52:020, <i>Title V permits</i>	Source-wide
90 tpy of VOC emissions	To preclude 401 KAR 52:020, <i>Title V permits</i>	Source-wide
9.0 tpy of individual HAP emissions	To preclude major source status for HAP	Source-wide
22.5 tpy of combined HAP emissions	To preclude major source status for HAP	Source-wide

**Table B - Summary of Applicable Regulations:**

<b>Applicable Regulations</b>	<b>Emission Unit</b>
<b>401 KAR 59:010, <i>New process operations</i></b> , applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates in 401 KAR Chapter 59, commenced on or after July 2, 1975.	EPs 06, 07, 08, 09, & 11 EUs 02, 46, 48, 49, 50, 51, & 52
<b>401 KAR 59:015, <i>New indirect heat exchangers</i></b> , particulate matter and sulfur dioxide emissions limitations apply to affected facilities with a capacity of 250 million Btu/hr heat input or less, and greater than one (1) mmBtu/hr, and constructed after April 9, 1972.	40
<b>401 KAR 61:020, <i>Existing process operations</i></b> , applies to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates commenced before July 2, 1975.	EP 20-2, EU 01
<b>401 KAR 63:002, Section 2(4)(h), 40 C.F.R. 63.340 to 63.348, Table 1 (Subpart N), <i>National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks</i></b> . The source submitted the initial notification July 24, 1995, the notification of compliance on February 24, 1996 and the Decorative Chromium Electroplating Operations and Maintenance Plan on January 11, 1996. The applicable emission limits, work practice standards, monitoring, recordkeeping and reporting requirements are included in the permit.	EU 46 (EP 46-1)
<b>401 KAR 63:002, Section 2(4)(uuuuu), 40 CFR 63.11504 to 63.11512, Table 1 (Subpart WWWWWW), <i>National Emission Standard for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations</i></b> , applies to the non-chromium electroplating tanks that use or emit plating and polishing metal HAP, which means any compound of the following metals: cadmium, chromium, lead, manganese, and nickel. This includes emission points 48-1, 50-4, 50-5, and emission units 51 and 52. These tanks contain one or more of the plating and	EUs 48, 50, 51, & 52

Applicable Regulations	Emission Unit
polishing metal HAP and operate at a pH of less than 12. They do not meet the definition of “flash” or short-term electroplating. The buffing/polishing processes do not meet the definition of “dry mechanical polishing” are therefore not subject to this subpart. The permittee shall achieve compliance with the applicable provisions in this subpart upon startup of affected source, since the affected source was started up after July 1, 2008.	
<b>401 KAR 63:020, <i>Potentially hazardous matter or toxic substances.</i></b> This regulation is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to provisions of an administrative regulation of the Division for Air Quality. This regulation applies to emissions of Ethylene Glycol Monobutyl Ether, aluminum, Butyl Benzyl Phthlate (BBP), 1,2,4-trimethylbenzene, and styrene.	EPs 06, 07, 08, 09, 11, & 40

**Table C - Summary of Precluded Regulations:**

Precluded Regulations	Emission Unit
<b>401 KAR 52:020, <i>Title V permits,</i></b> is precluded by taking the source-wide emission limitations of 90 tons per year for PM, PM <sub>10</sub> , PM <sub>2.5</sub> , and VOC emissions, 9 tons per year of individual HAP, and 22.5 tons per year of combined HAPs.	Source-wide

**Table D - Summary of Non Applicable Regulations:**

N/A

**Air Toxic Analysis**

**401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances***

The Division for Air Quality (Division) has performed SCREEN View (during permit renewal F-15-002) of potentially hazardous matter or toxic substances (on all subject pollutants) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

**Single Source Determination**

N/A

**SECTION 5 – PERMITTING HISTORY**

<b>Permit</b>	<b>Permit Type</b>	<b>Activity#</b>	<b>Complete Date</b>	<b>Issuance Date</b>	<b>Summary of Action</b>	<b>PSD/Syn Minor</b>
F-07-037	Initial	APE20040001	2/13/2008	3/18/2009	Initial Operating Permit	N/A
F-07-037 R1	Revision 1	APE20100001	4/6/2010	4/7/2010	Admin. Amend. (Name change from Ken Dec, Inc. To Kentucky Chrome Works, LLC)	N/A
F-07-037 R2	Revision 2	APE20100002	4/6/2010	12/7/2010	Sig. Modification (removal & addition of equipment)	N/A
F-15-002	Renewal	APE20140001	4/20/2015	9/29/2015	Renewal Permit	N/A
F-15-002 R1	Revision 1	APE20160001	8/15/2016	8/22/2016	Administrative amendment to resolve typographical errors	N/A
F-19-039	Rnewal	APE20190001	6/24/2019	1/25/2020	Renewal Permit	N/A

## **SECTION 6 – PERMIT APPLICATION HISTORY**

N/A

## **APPENDIX A – ABBREVIATIONS AND ACRONYMS**

AAQS	– Ambient Air Quality Standards
Btu	– British thermal unit
CO	– Carbon Monoxide
Division	– Kentucky Division for Air Quality
EP	– Emission Point
EU	– Emission Unit
HAP	– Hazardous Air Pollutant
HF	– Hydrogen Fluoride (Gaseous)
MSDS	– Material Safety Data Sheets
NAAQS	– National Ambient Air Quality Standards
NESHAP	– National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	– Nitrogen Oxides
PM	– Particulate Matter
PM <sub>10</sub>	– Particulate Matter equal to or smaller than 10 micrometers
PM <sub>2.5</sub>	– Particulate Matter equal to or smaller than 2.5 micrometers
PTE	– Potential to Emit
VOC	– Volatile Organic Compounds